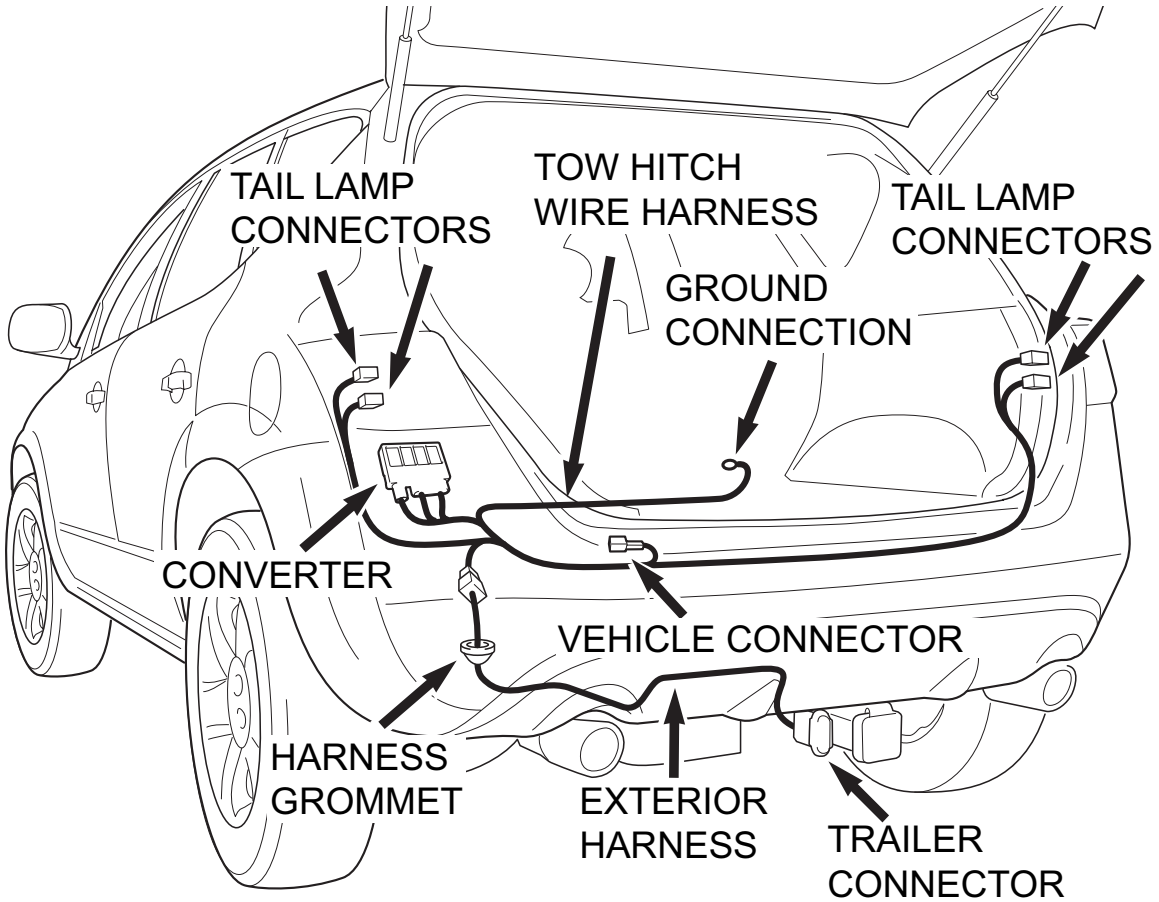
INSTALLATION INSTRUCTIONS

[1] Description: Tow Hitch Wire Harness Kit

[2] Application: Murano (2009-)

[3] Part Number: 999T8 CU000

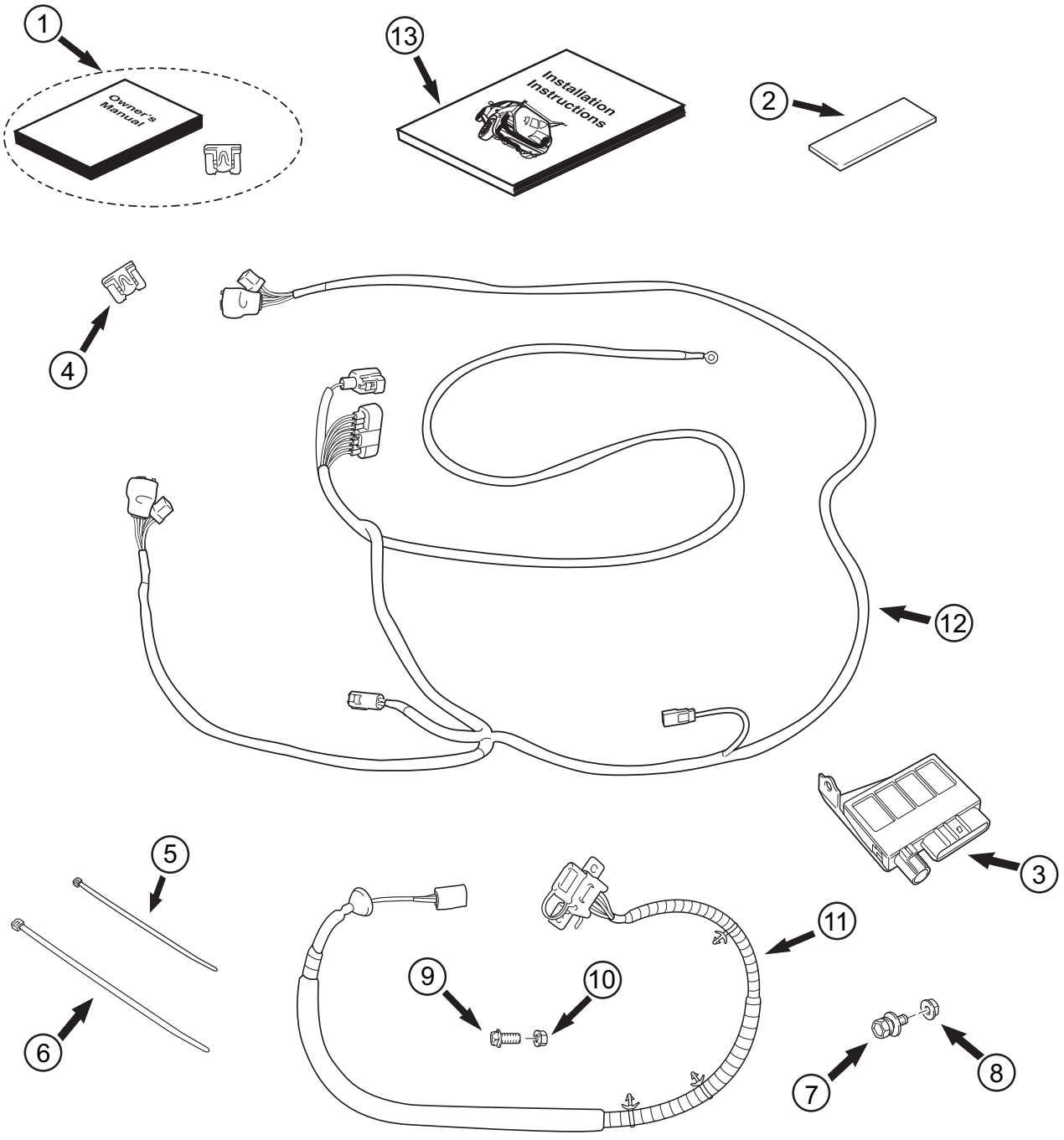
[4] Illustration of the Completed Installation



[5] Kit Contents

NO.	DESCRIPTION	QTY.
1	Owner's manual including fuse	1
2	Packing (foam tape)	1
3	Converter	1
4	Fuse (30A)	1
5	Plastic ties	25
6	Plastic ties (heat resistance)	3
7	Bolt (M8 x ℓ16)	1

NO.	DESCRIPTION	QTY.
8	Nut (M8)	1
9	Bolt (M5 x ℓ16)	2
10	Nut (M5)	2
11	Exterior harness	1
12	Tow hitch wire harness	1
13	Installation manual	1



[6] Tools Required

1. Hand tools: 3/8 drive ratchet, 3/8 drive extension (300mm), sockets: 10mm, 13mm, combination wrenches: 8mm, 10mm, torque wrench (32 in•lb to 120 in•lb), small screwdriver, and true flush cutters.
2. Special tools: Nylon removal tool and plastic clip removal tool.
3. Other: Fender covers, proper clothing, isopropyl alcohol.

NOTE

- Lay out all tools necessary to perform the installation.
- Use appropriate tools and recommended special tools where specified.

[7] Installation Precautions

1. This manual contains installation procedures for the Nissan Murano tow hitch wiring harness and power converter. In order to assure your safety and the proper installation of this kit, this manual should be read thoroughly. It is especially important that all precautions are completely understood before starting any installation task. **General information and some illustrations outlined in this installation manual are from Nissan Motor Co., Ltd. service manuals.**
2. If installation will be carried out by more than one person, pay special attention to ensure co-worker's safety.
3. Make sure sufficient ventilation is provided while engine is running.
4. Take special care when working with heated, rotating, sliding, or moving parts to prevent bodily injury.
5. When raising the vehicle, refer to the appropriate manufacturer's service manual.
6. Take special care to ensure clearance between components such as brake parts, fuel system, and electric wires as specified in this publication.
7. If a problem is found with the tow hitch system due to installation, refer back to the instructions to correct the problem.

Supplemental Restraint System (SRS) "Air Bag"

- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in the Service Manual. For easy identification, SRS wiring harnesses are covered with yellow insulation either just before the harness connectors or for the complete harness.

Definition of Terms

⚠ WARNING

- This is used to indicate the presence of a hazard that could cause serious personal injury or death. To avoid or reduce the risk, the procedures must be followed precisely.

⚠ CAUTION

- This is used to indicate the presence of a hazard that could cause minor or moderate personal injury or damage to your vehicle. To avoid or reduce the risk, the procedures must be followed carefully.

NOTE

- Provides additional information that facilitates installation work.

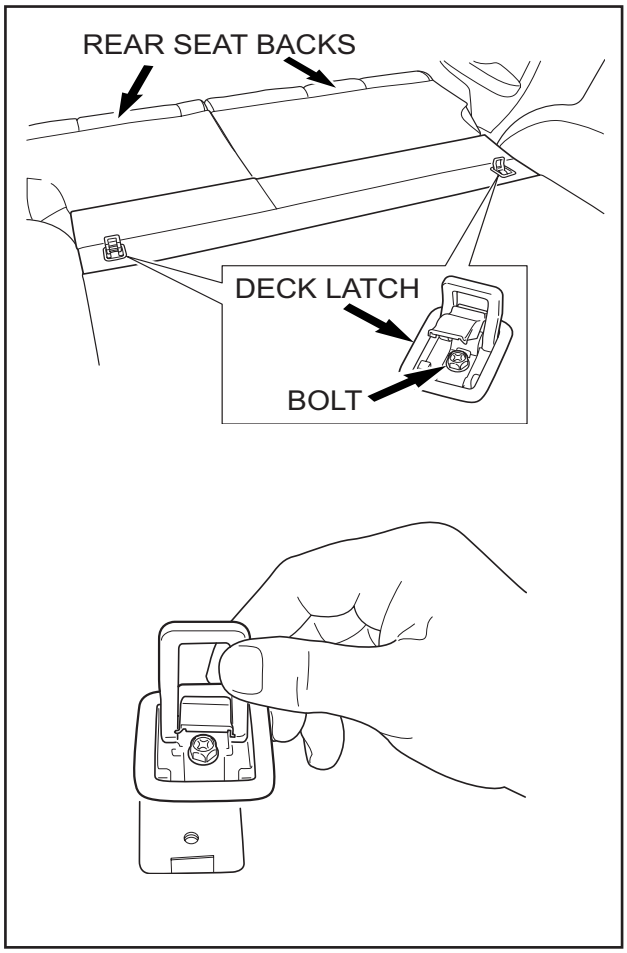
[8] Preparation for Installation

1. Park the vehicle on level flat ground.
2. Turn off the ignition and engage the parking brake.
3. Record all radio presets (if necessary).
4. Check that all vehicle lighting systems are functional (headlamps, brake lights, turn signals, side markers, reverse lights, etc.).
5. Disconnect the negative terminal of the battery.

[9] Component Removal

NOTE

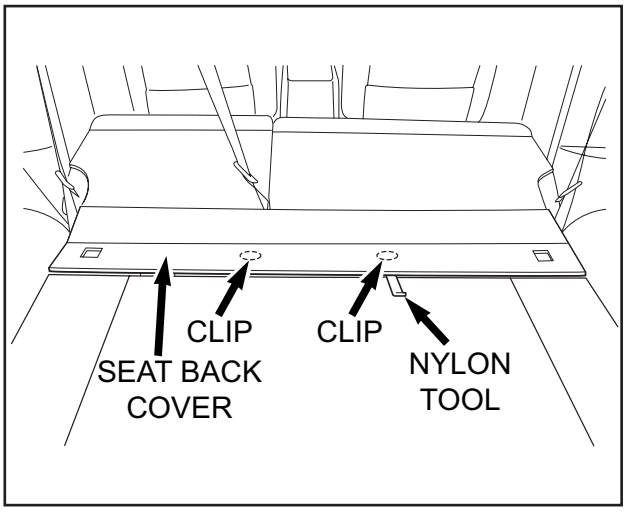
- When removing interior components place on a clean dry surface; safe from damage, soiling and loss.



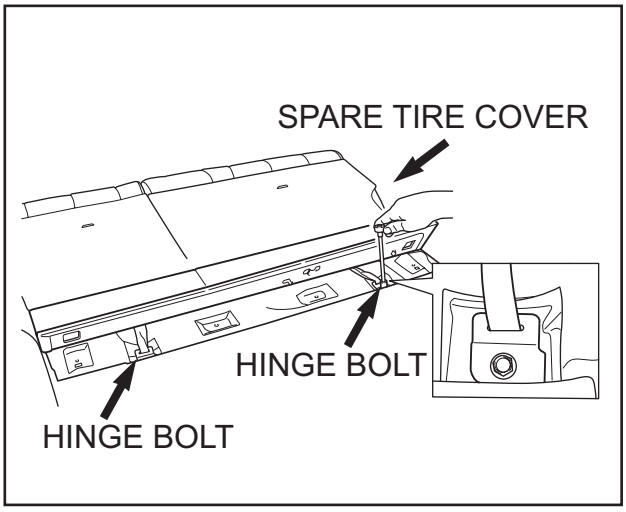
1. Remove package cover. Fold down both rear seat backs. Using a 10mm socket, remove the two (2) bolts, then remove the deck latches using a nylon tool to release the retaining clips.
   - Open deck latch cover with nylon removal tool.
   - Remove the bolt using a 10mm socket.
   - Lift and remove the deck latch.

NOTE

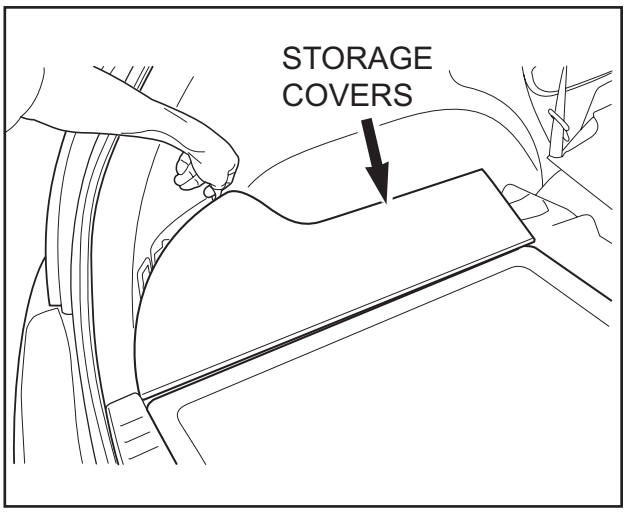
- The latch has an alignment tab that fits into a recess.



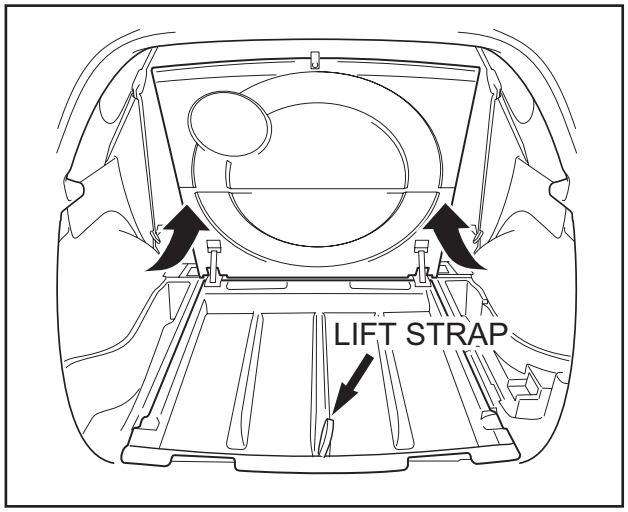
2. Lift the seat back cover by using the nylon tool at clip locations.



3. Using a 13mm socket, remove the two (2) hinge bolts that secure the spare tire cover.



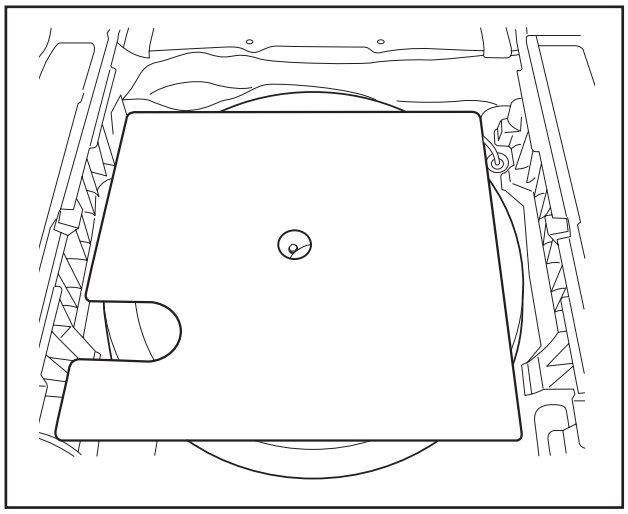
4A. Remove the driver's side and passenger's side storage covers.



4B. Lift storage tray cover and remove storage tray.

NOTE

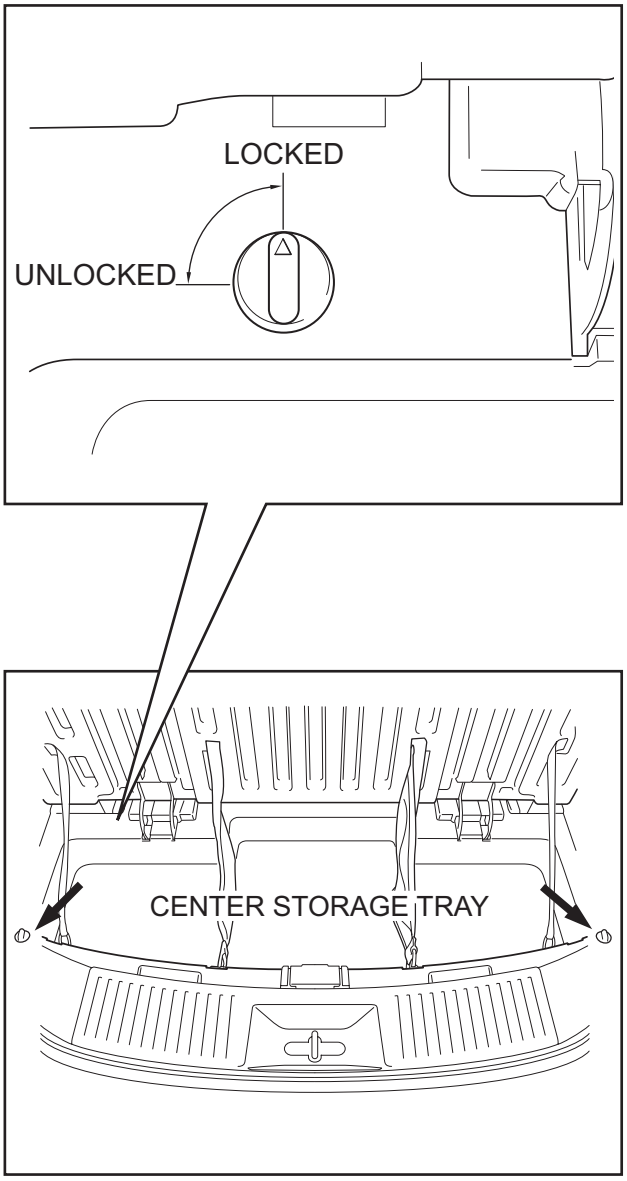
- Some vehicles may have a different style storage tray. See step 5 for instructions on how to remove the storage tray.



4C. Remove spare tire cover.

NOTE

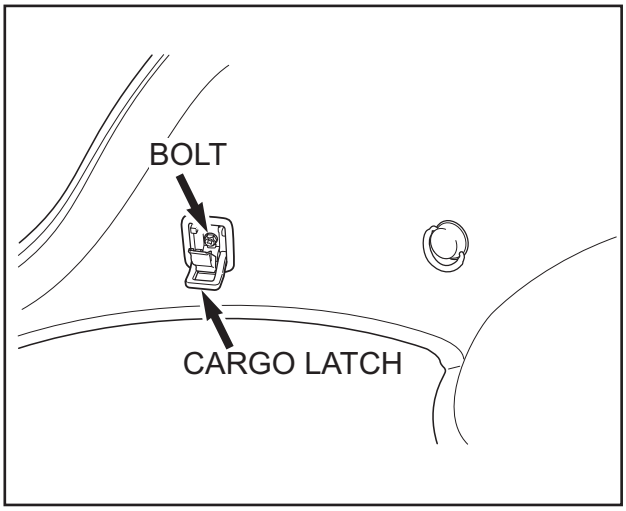
- The open portion of the cover is to the rear driver's side.



5. Open the center storage tray and turn the knobs counter clockwise to release. Next, remove the storage tray.

NOTE

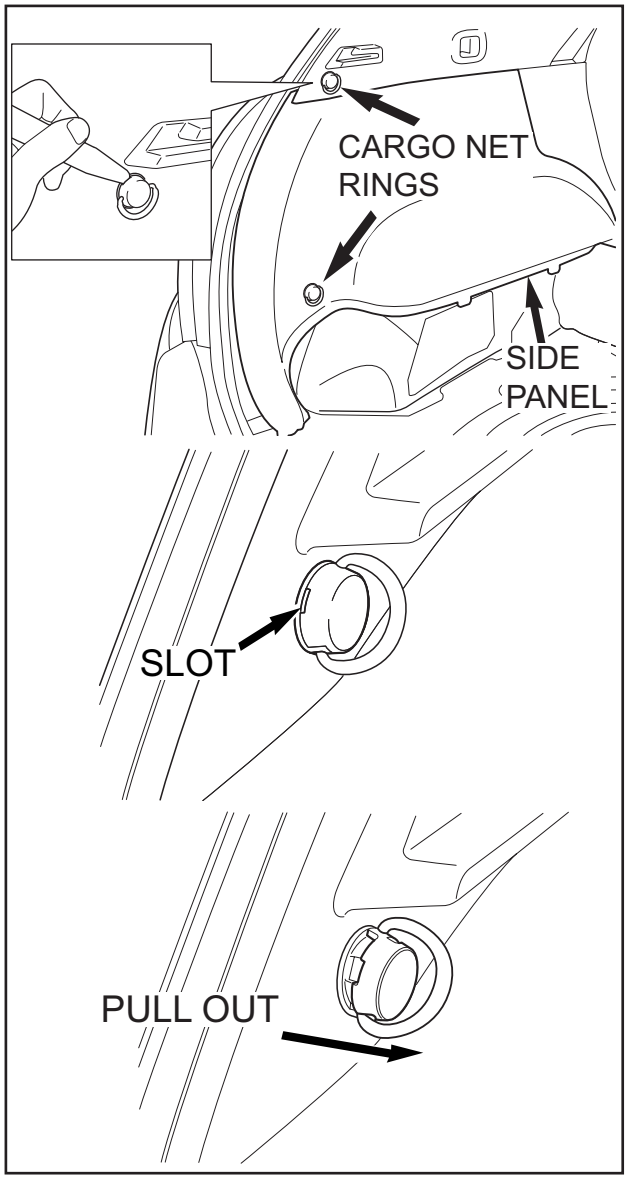
- This style of storage tray is optional on some models.



6. Using a nylon tool and a 10mm socket, remove the driver's side and passenger's side cargo latch.

NOTE

- During reassembly, make sure alignment tab fits into the recess so latch sits flat.



7. Using a nylon tool, remove the driver's side and passenger's side cargo net ring (see image).

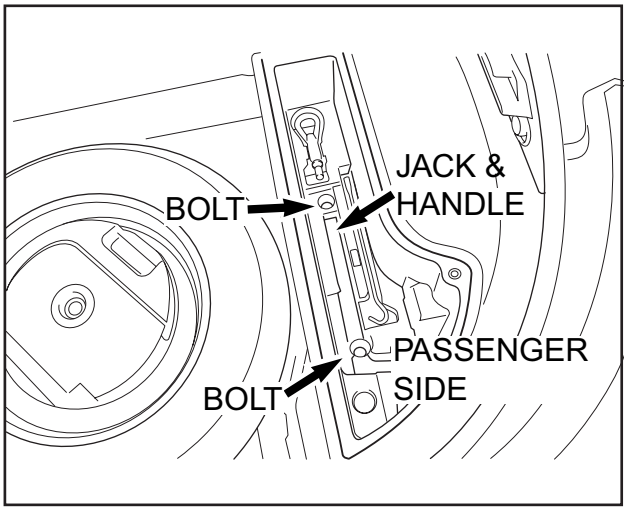
   Remove the cargo net ring by:

   • Locating the slot in the ring.

   • Positioning the nylon tool in the slot.

   • Prying carefully with the nylon tool to release the cargo net ring.

   • Pulling the cargo net ring from the side panel.

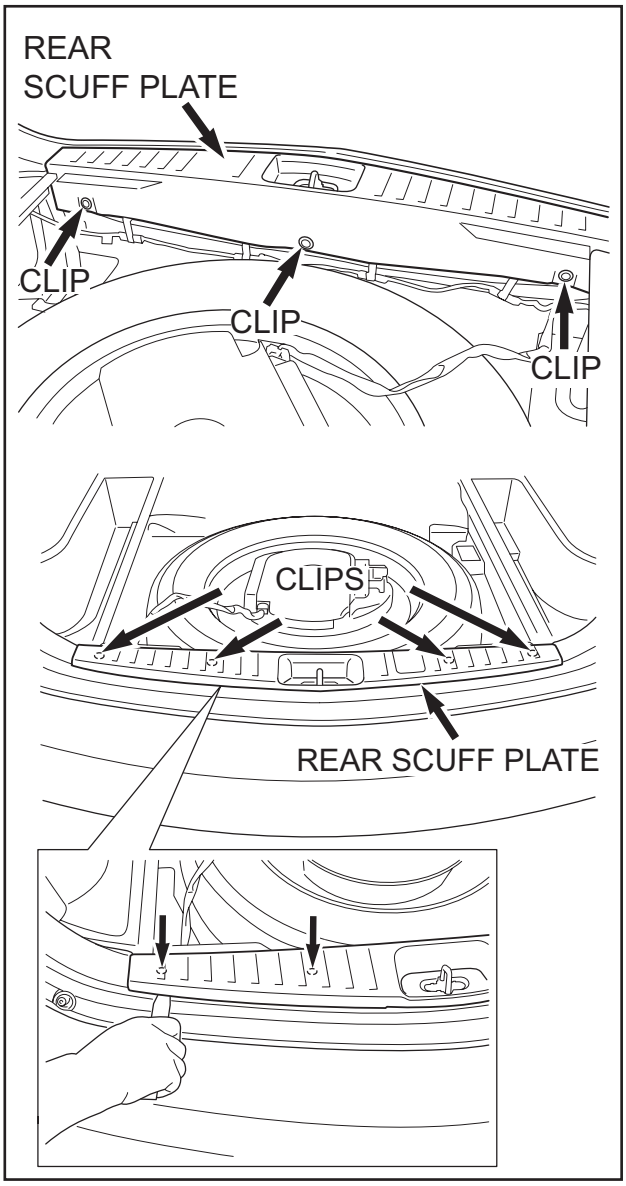


8A. Remove the jack and handle from the passenger side storage box.

8B. Using a 10mm socket and a 300mm extension, remove the two (2) bolts.

NOTE

• Also remove the two (2) bolts from the driver's side storage box.



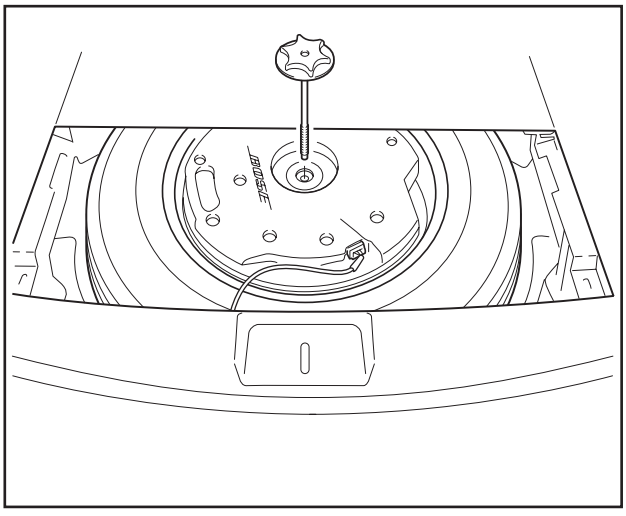
9A. Remove the rear deck scuff plate and latch cover.

NOTE

• See detailed inset of image.

9B. Remove the push type clips..

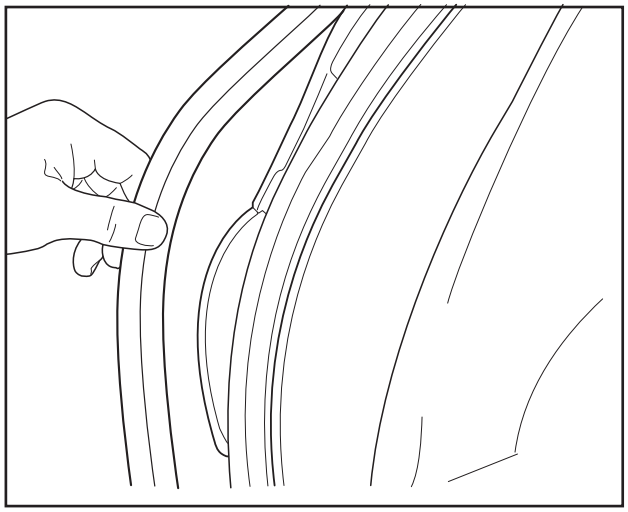
9C. Using a nylon tool, unlatch the clips located on the bottom of the rear scuff plate.



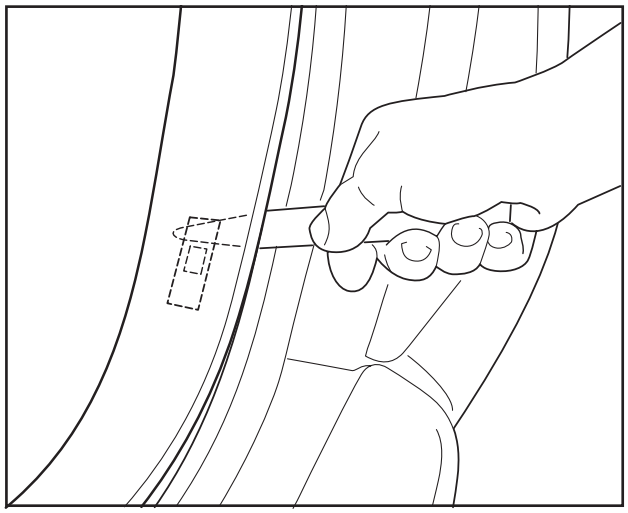
10. Remove spare tire.

NOTE

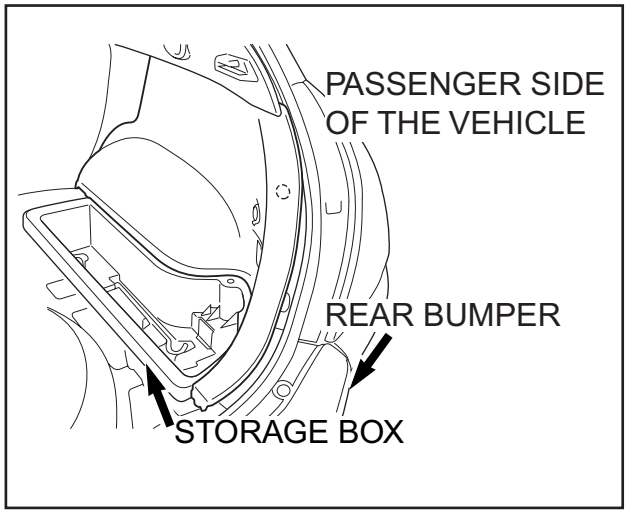
• If equipped with a woofer, before removing the spare tire, unplug the lead wire from the woofer and remove the woofer.



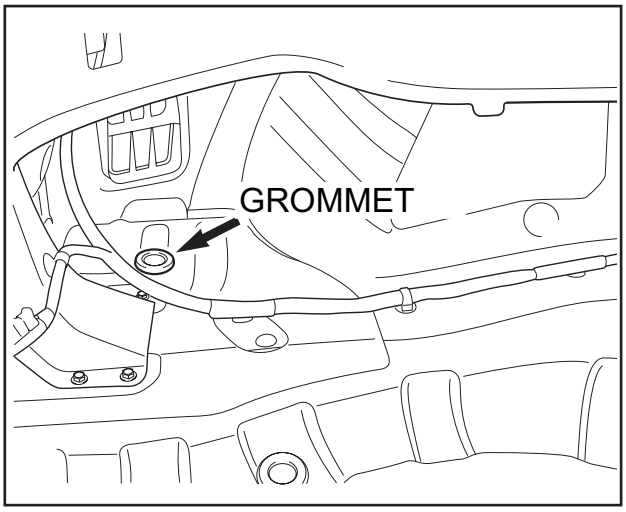
11. Partially remove the driver's side and passenger's side rear door seal up to just above the tail light.



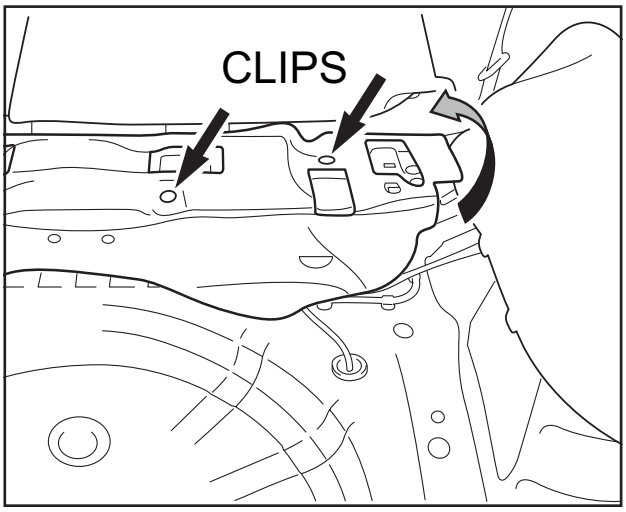
12. Using a nylon tool, slightly lift the trim panel. Locate and verify the clip attachments on the driver's and passenger panels in two (2) places.



13. Remove driver's side and passenger's side storage box.

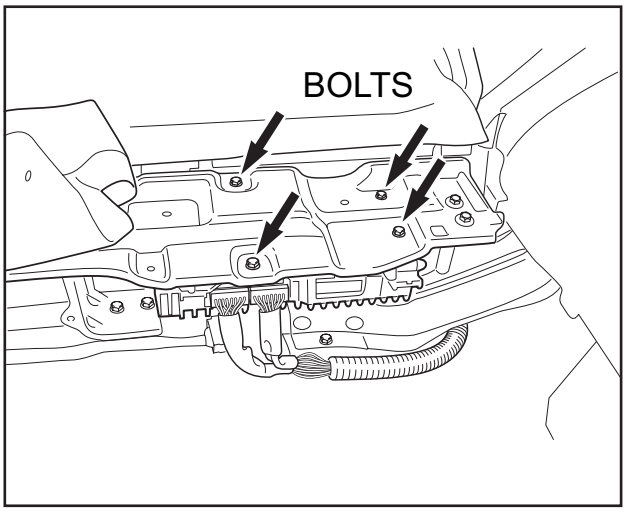


14. Remove and discard rubber grommet on the driver's side rear floor.



15. Remove each of the two clips off the vinyl protector.

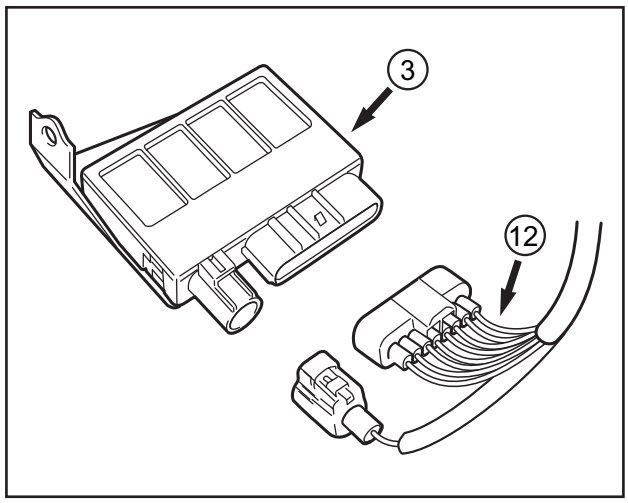
16. Temporarily turn over the vinyl protector.



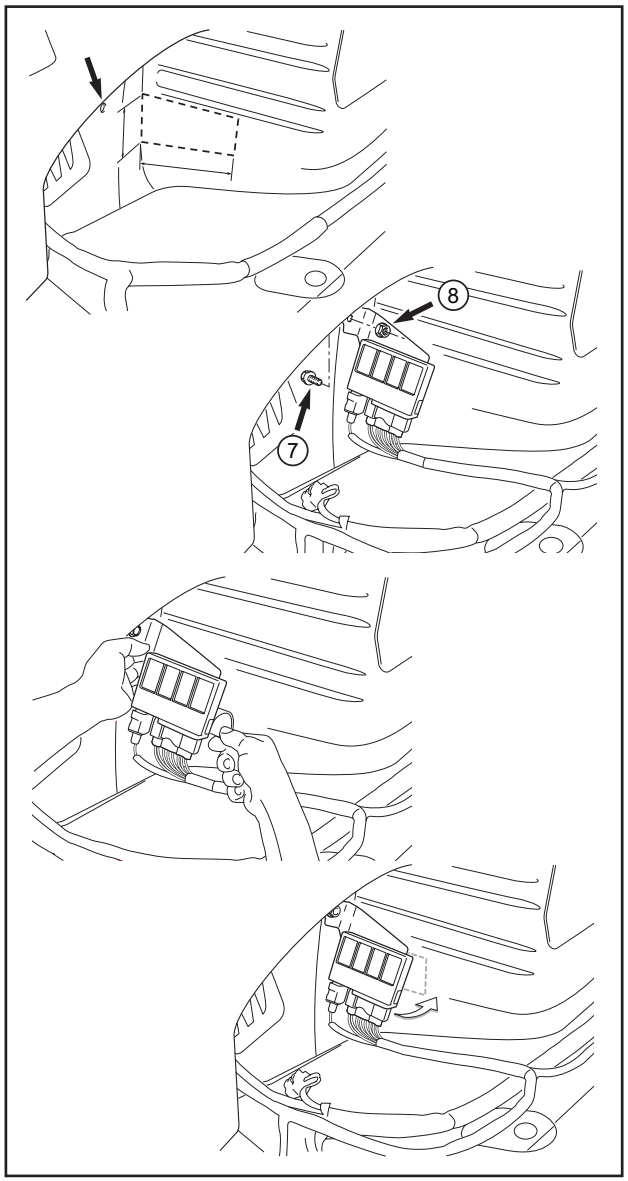
17. Remove the four bolts holding the BOSE amplifier.

18. Move the BOSE amplifier to gain access to the ground bolt.

[10] Component Installation



1. Connect the 8-pin connector and 1-pin connector of the tow hitch wire harness to the converter ③.



2A. Mount the converter ③.

2B. Locate the mounting hole on the lower driver's side rear interior area. Next locate the area on the wheel well that the converter ③ will be mounted.

2C. Clean this area with isopropyl alcohol.

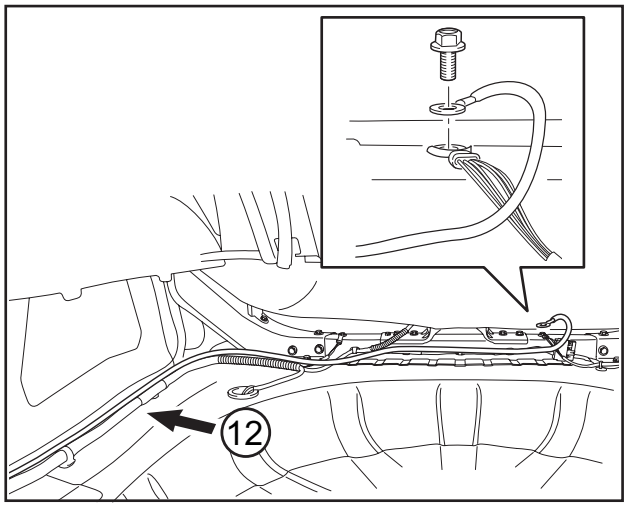
NOTE

- Clean the surface with isopropyl alcohol. Mix one part isopropyl alcohol to one part of water.

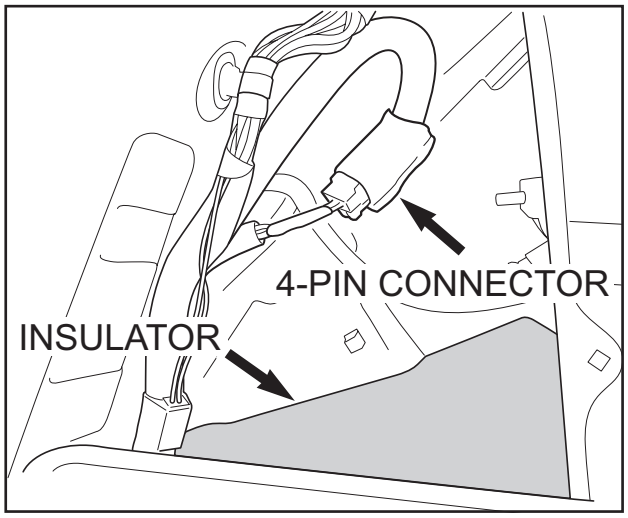
2D. Insert the M8 X ℓ 16 ⑦ bolt from the back side, place the converter ③ bracket over the bolt and start the nut ⑧. Do not tighten at this time.

2E. Locate the correct mounting position, then remove the protective tape from the butyl tape on the back of the converter ③.

2F. Place the converter on the mounting area and then tighten the mounting bolt ⑦ and nut ⑧ to 13.5 N-m (0.39 Kg-m 119 in-lb).



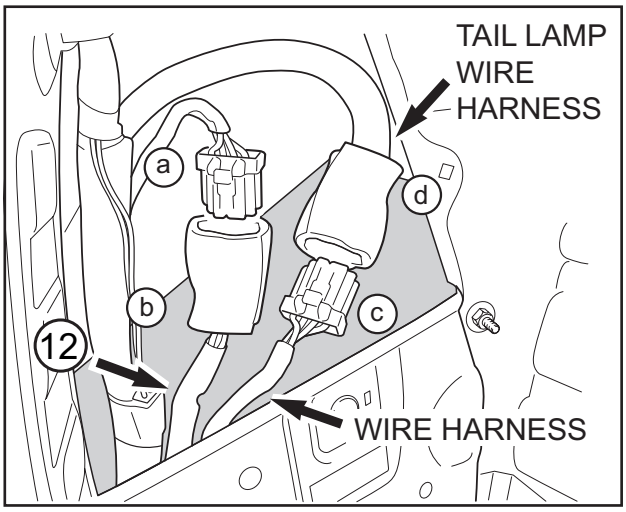
3. Route the tow hitch wire harness ⑫ ground lead to the ground bolt located on the passenger side, near the rear seat. Remove the existing ground bolt and place the eyelet of the ground wire as shown. Reinstall the original ground bolt and tighten to 8 N-m (0.8 Kg-m 71 in-lb)



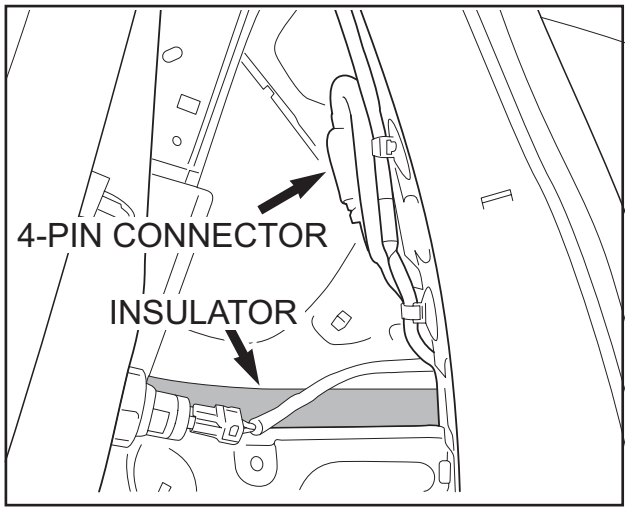
4. Route the driver's side section of the interior wire harness to the driver's side rear tail lamp 4-pin connector. Disconnect the driver's side rear tail lamp 4-pin connector.

NOTE

- Make sure after the interior wire harness is routed, the vehicle foam insulator is in its proper location.



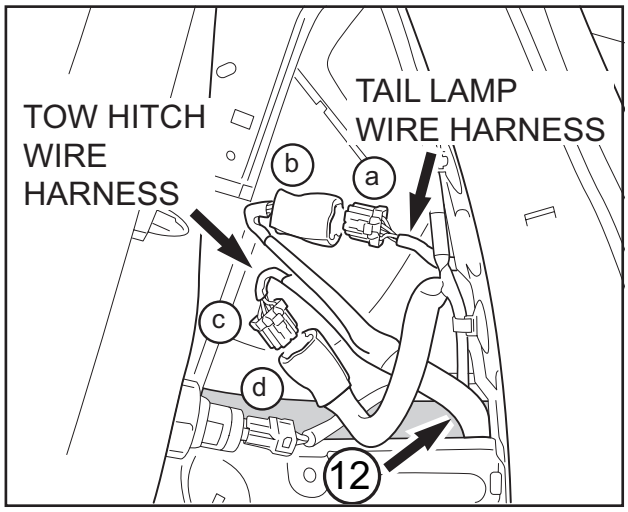
5. Connect the driver's side vehicle wire harness 4-pin connector (a) to the tow hitch wire harness ⑫ 4-pin connector (b). Connect the tow hitch wire 4-pin (c) and the tail lamp wire harness 4-pin connector (d) (with packing (foam tape)).



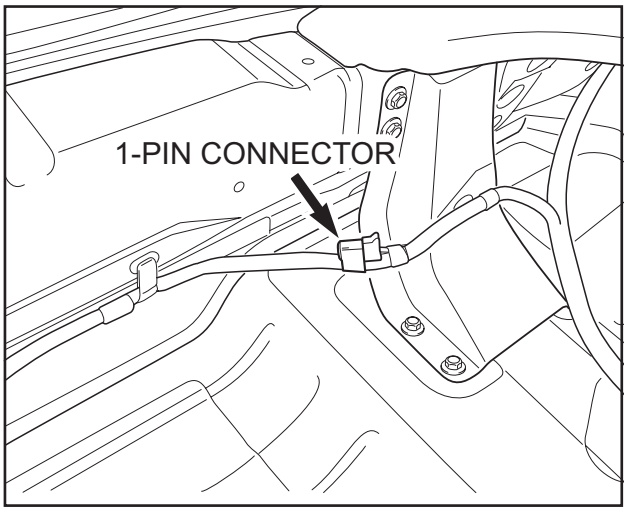
6. Route the passenger side tail lamp harness connectors of the tow hitch wire harness to the passenger side tail lamp connectors. Disconnect the vehicle tail lamp connectors.

NOTE

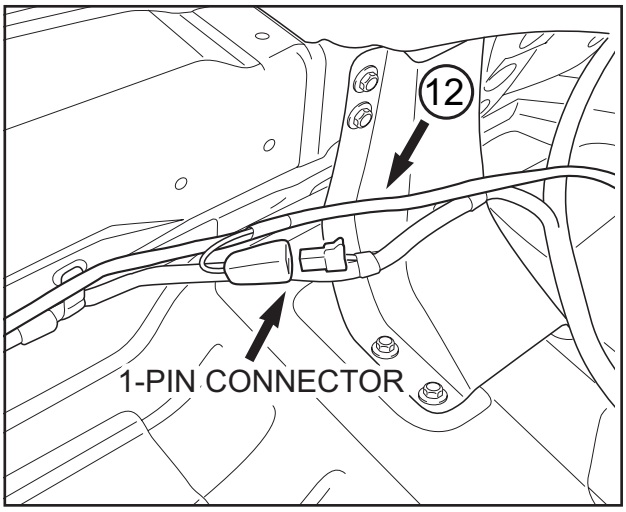
- Make sure after the interior wire harness is routed, the vehicle foam insulator is in its proper location.



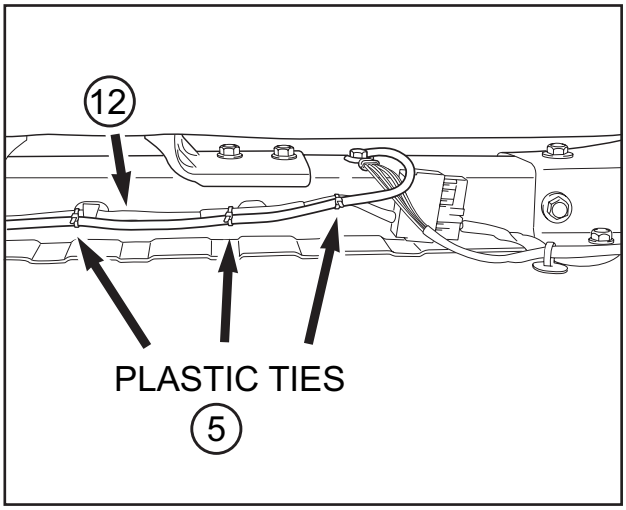
7. Connect the passenger side vehicle wire harness 4-pin connector (a) to the tow hitch wire harness ⑫ 4-pin connector (b). Connect the tow hitch wire ⑫ 4-pin (c) and the tail lamp wire harness 4-pin connector (d) (with packing (foam tape)).



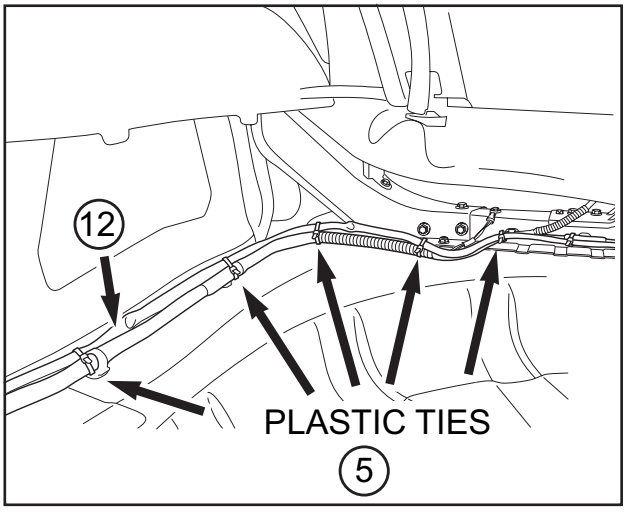
8. Remove the tape from the vehicle 1-pin connector.



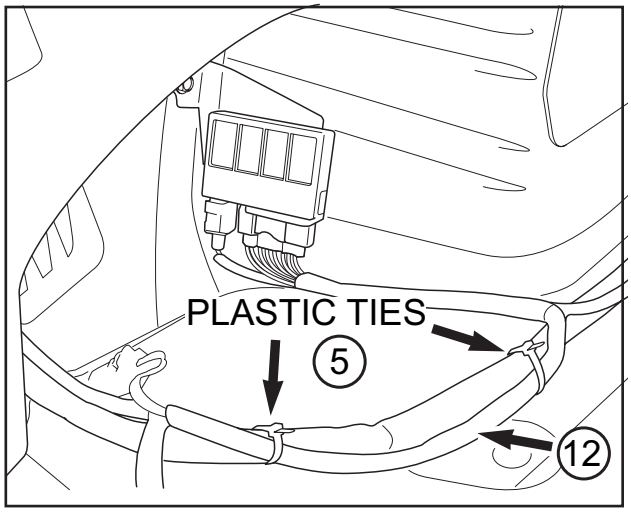
9. Connect the vehicle 1-pin connector and the tow hitch wire harness connector.



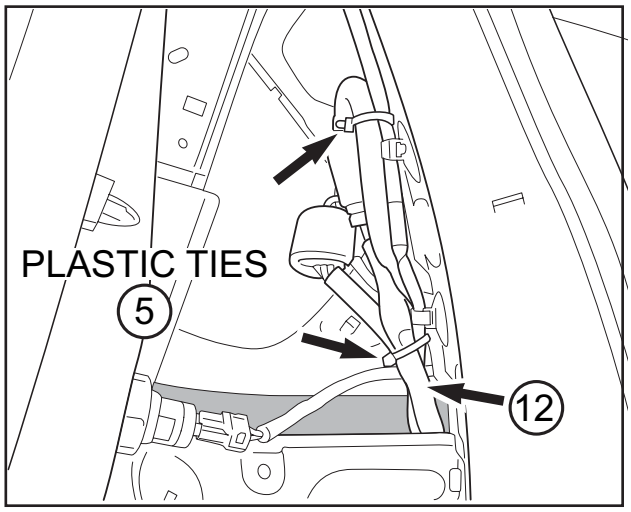
10. Secure the ground lead portion of the tow hitch wire harness ⑫ using three (3) plastic ties ⑤.



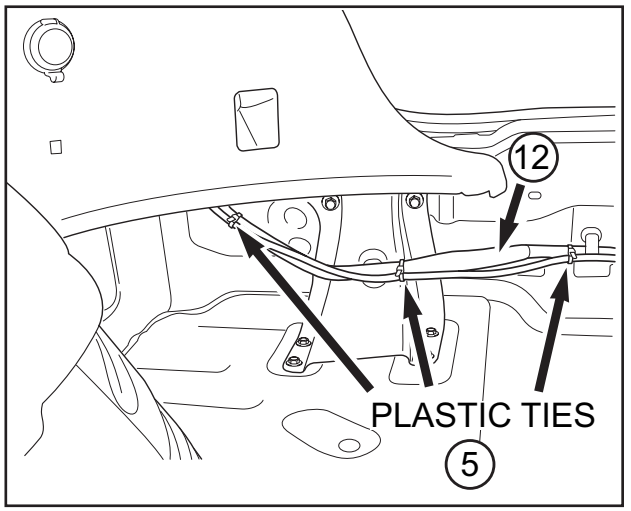
11. Secure the ground lead portion of the tow hitch wire harness ⑫ using five (5) plastic ties ⑤. (Driver's side from center area going rearward.)



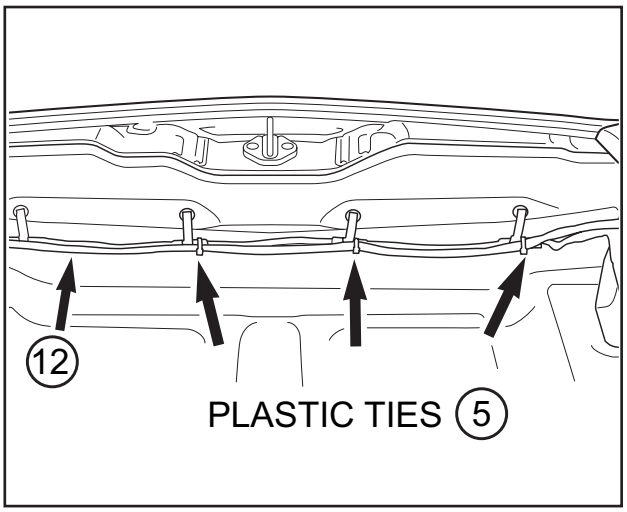
12. Secure the driver's side portion of the tow hitch wire harness ⑫ using two (2) plastic ties ⑤.



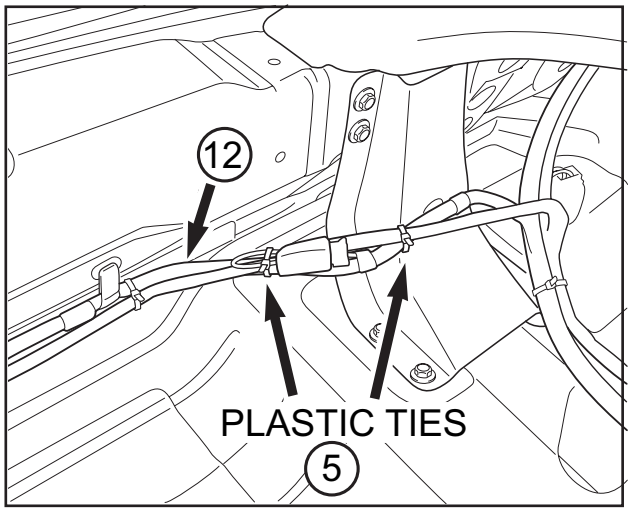
13. Secure the passenger side portion of the tow hitch wire harness ⑫ using two (2) plastic ties ⑤. (Passenger side tail lamp area.)



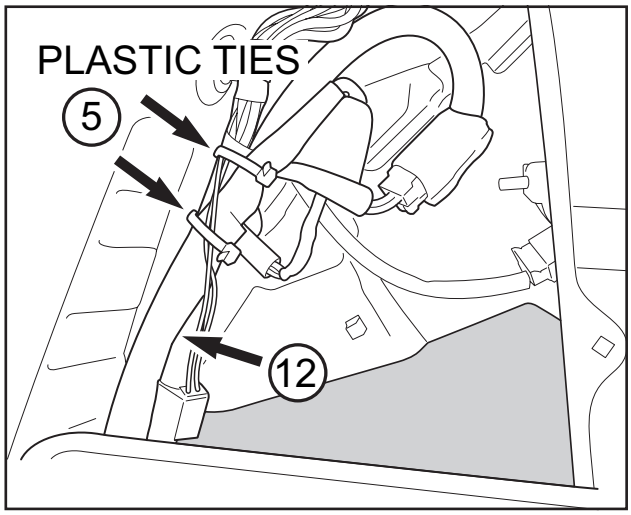
14. Secure the passenger side portion of the tow hitch wire harness ⑫ using three (3) plastic ties ⑤. (Lower passenger side, below tail lamp area.)



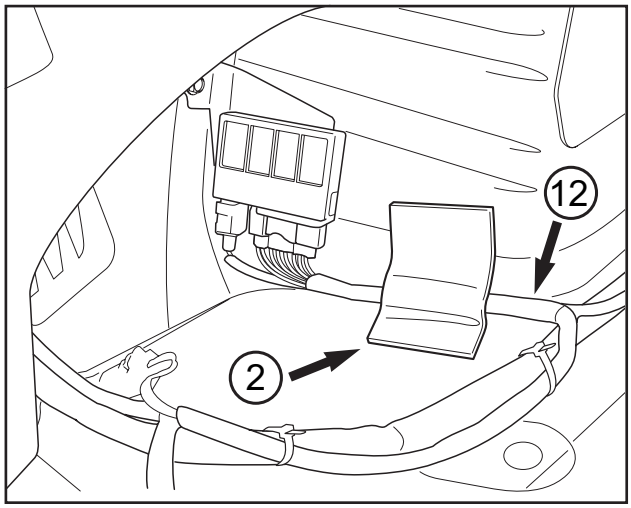
15. Secure the rear portion of the tow hitch wire harness ⑫ using three (3) plastic ties ⑤. (Across the back of the interior.)



16. Secure the driver's side portion of the tow hitch wire harness ⑫ using two (2) plastic ties ⑤. (Rear lower area drive side tail lamp area.)



17. Secure the driver's side portion of the tow hitch wire harness ⑫ using two (2) plastic ties ⑤. (Driver's side tail lamp area.)

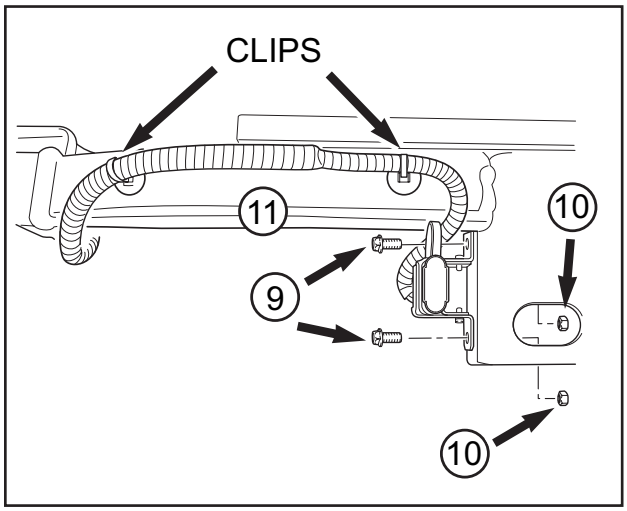


18. Apply packing (foam tape) ② over the tow hitch wire harness ⑫ to secure it to the body.

NOTE

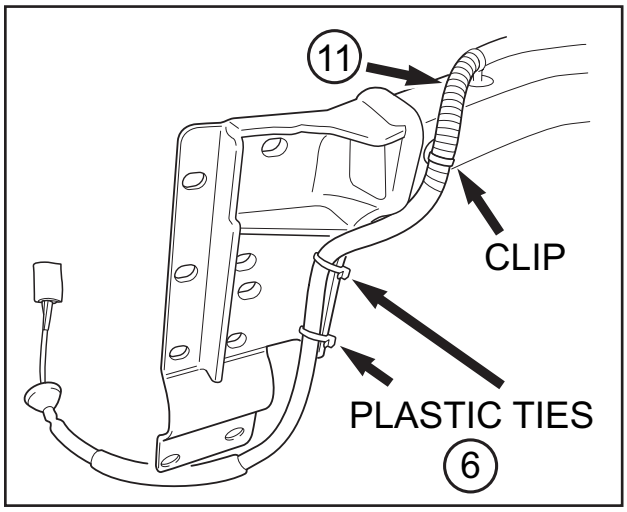
- Clean the surface with isopropyl alcohol. Mix one part isopropyl alcohol to one part of water.

[11] Installation Underside of the Vehicle

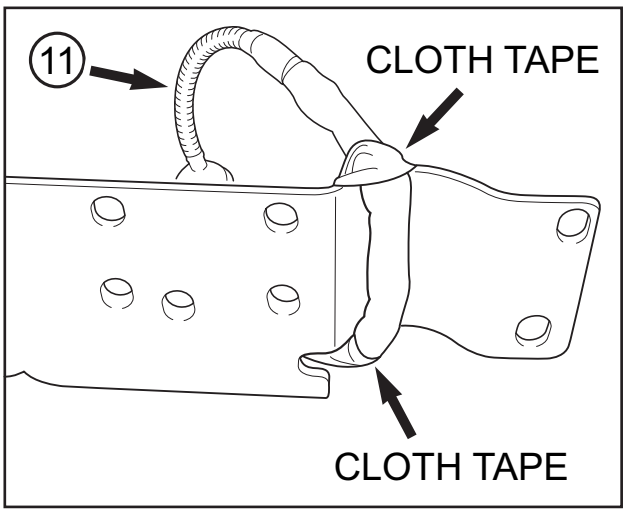


1a. Route the exterior harness ⑪ along the driver's side of the hitch member and secure it using the two (2) retainer clips.

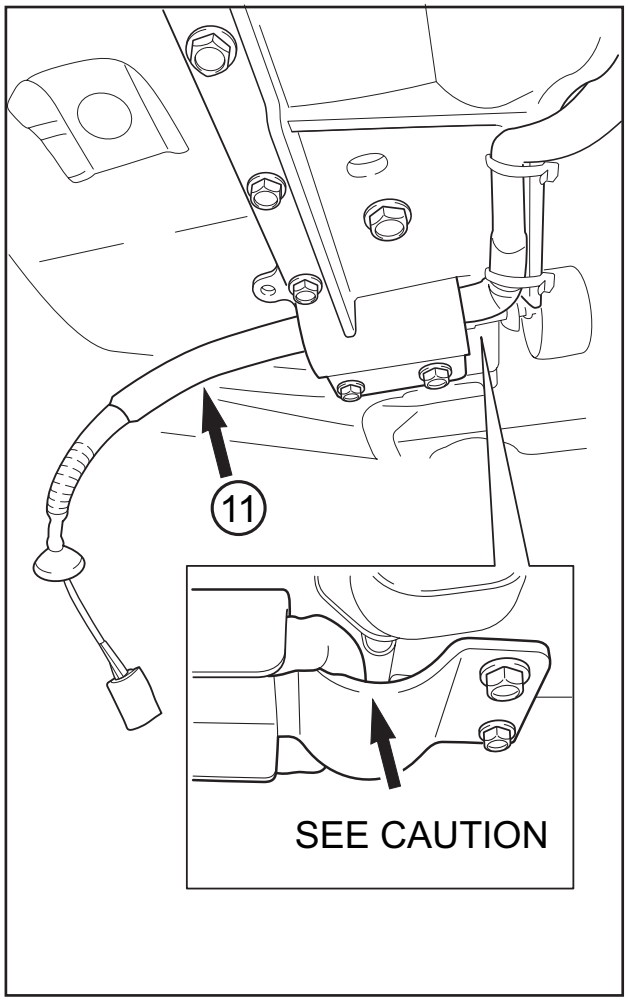
1b. Install the flat 4-pin connector on the tow hitch member using two (2) bolts (M5 X ℓ 16) ⑨ and nuts (M5) ⑩. Torque to 3.9 N-m (0.39 Kg-m, 35 in-lb).



2. Route the exterior harness ⑪ along the driver's side of the hitch member and secure it using the one (1) retainer clips and two (2) plastic ties (heat resistant) ⑥.



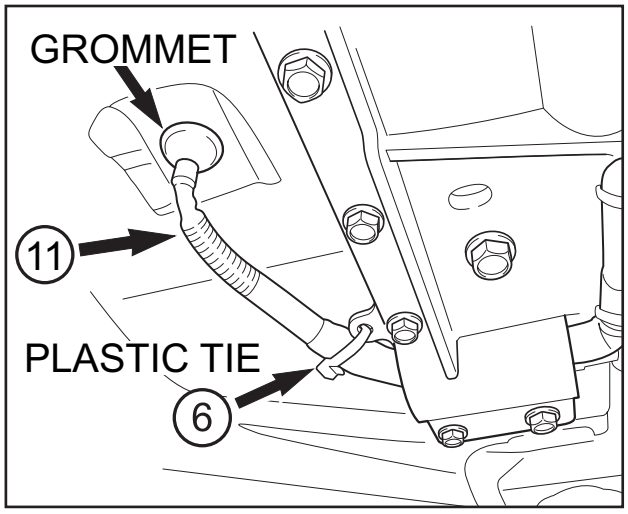
3. Temporarily secure the exterior wire harness ⑪ to the hitch member, using cloth tape, before installing it onto the vehicle.



4. Install the hitch member onto the vehicle according to the hitch member manufacturer's specifications.

⚠ CAUTION

- Make sure the insulated portion of the wire harness is not pinched under the muffler hanger.

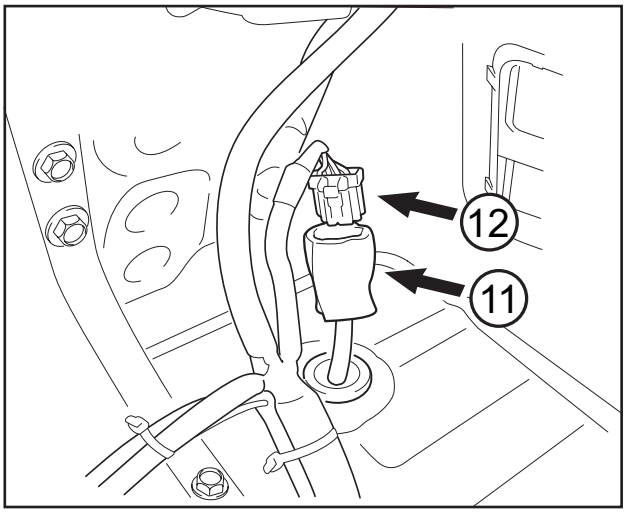


5. Route the 4-pin exterior harness ⑪ connector, from under the vehicle and install the grommet into the vehicle.

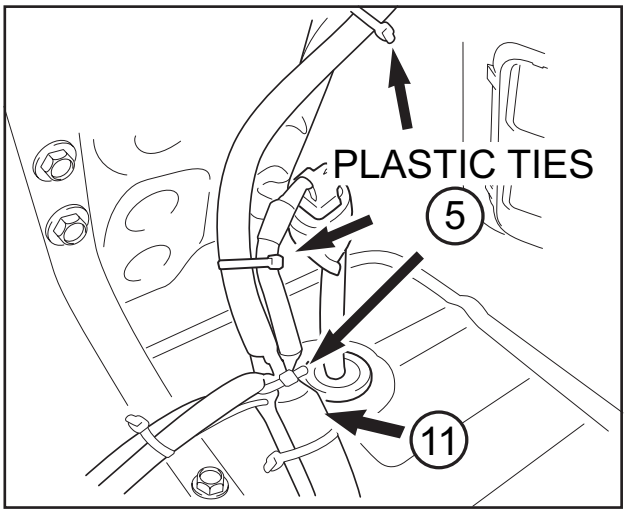
NOTE

- Pass the grommet all the way through the hole and then seat the grommet. Make sure the grommet is completely sealed.

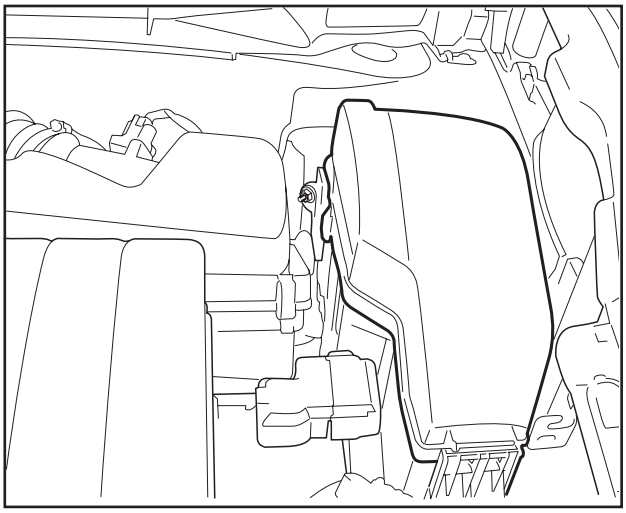
6. Secure the tow hitch wire harness using one (1) plastic tie (heat resistant) ⑥.



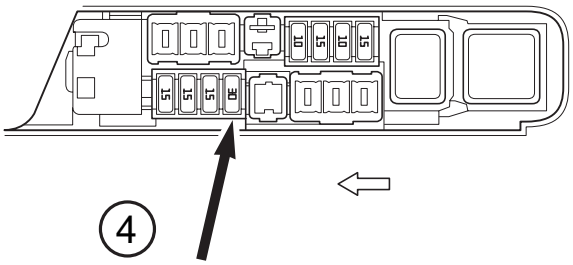
7. Connect the 4-pin exterior harness ⑪ connector with the tow hitch wire harness 4-pin connector ⑫.



8. Secure the tow hitch wire harness ⑪ using three (3) plastic ties ⑤.



9. Remove the fuse box cover located on the driver's side of the vehicle.



④
TRAILER LAMP
30-AMP FUSE

10. Install the 30-amp fuse ④ in the fuse box located next to the driver's side fender.

NOTE

- Some vehicles may already be equipped with a fuse from the factory. If there is a 30 amp fuse in this location, it is not necessary to install the fuse from the kit.

[12] Operational Verification

The following checks are to be performed with the ignition switch in “ON” position and the engine stopped.

Check	Condition
– Faults in wiring harness installation.	– Correct routing of the wire harness.
– Converter mounting.	– Pushing or pulling of the converter by any outside force.
– Wire harness.	– Pinching of the wire harness.
– Plastic tie locations.	– Position of the plastic tie locations.
– Removed parts.	– Scratches or other damages.
– Check the battery terminal for tightness with a 10mm socket and the battery cable angle is correct.	- Nut should have torque of 4.0 N•m [41 kgf•cm, 36 lbf•in]
– Turn on headlamps.	– Marker and tail lights on both tester and vehicle are lit.
– Turn on left turn signal.	– Left turn lights on both tester and vehicle are flashing.
– Turn on right turn signal.	– Right turn lights on both tester and vehicle are flashing.
– Apply foot brake.	– Stop lights on both tester and vehicle are lit.
– Turn on left turn signal and apply foot brake.	– Left turn lights are flashing and right stop lights are lit on both tester and vehicle.
– Turn on right turn signal and apply foot brake.	– Right turn lights are flashing and left stop lights are lit on both tester and vehicle.
– Turn on hazard lights switch.	– All turn signal lights are flashing on both tester and vehicle.
– With hazard lights switch on, apply the foot brake.	– Both stop lights on the vehicle are lit, both turn/stop lights on the tester and the turn lights on the vehicle are flashing.
– Turn off the hazard light switch, apply the foot brake.	– Both turn/stop lights on the tester and the stop lights on the vehicle are lit.

The following checks are to be performed with the ignition switch in “OFF” position.

Check	Condition
– Turn on headlamps.	– Marker and tail lights on both tester and vehicle are lit.
– Apply foot brake.	– Stop lights on both tester and vehicle are lit.
– Turn on left turn signal.	– Left turn lights are not lit on both tester and vehicle.
– Turn on right turn signal.	– Right turn lights are not lit on both tester and vehicle.
– Turn on left turn signal and apply foot brake.	– Both stop lights are lit and not flashing on both tester and vehicle.
– Turn on right turn signal and apply foot brake.	– Both stop lights are lit and not flashing on both tester and vehicle.
– With hazard lights switch on, apply the foot brake.	– All turn signal lights are flashing on both tester and vehicle.
– Turn off the hazard light switch, apply foot brake.	– Both stop lights on the vehicle and the turn/stop lights on the tester are lit, but not flashing.

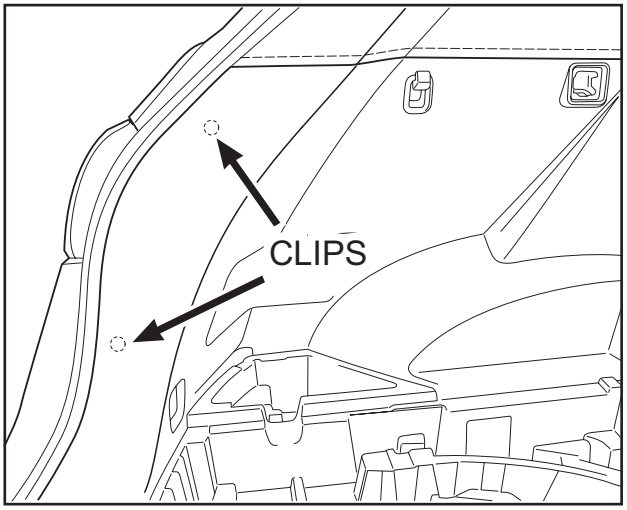
[13] Reinstallation of Components

Reinstall all parts temporarily removed from the vehicle.

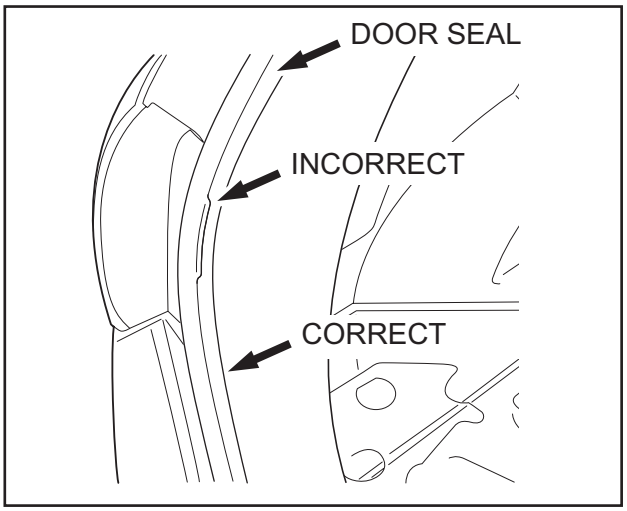
- Fuse box cover
- Fresh air intake
- Driver's and passenger side trim panel, cargo net ring and package cover bolt
- Driver's and passenger side storage tray and jack holder
- Storage tray
- Spare tire and woofer (if equipped)
- Rear scuff plate and latch cover
- Driver and passenger storage tray covers
- Package cover (if equipped)
- Rear seat back cover

⚠ CAUTION

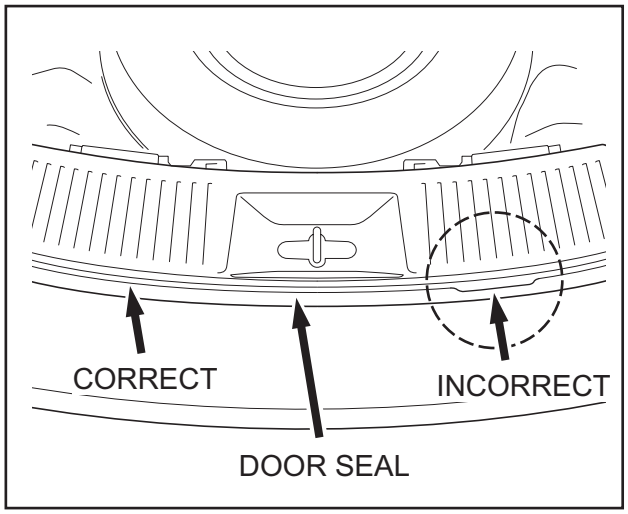
- Confirm that all rubber seals are properly installed on side panels and rear scuff plate.



1. Make sure the two (2) white clips are present and properly engaged.



2. Make sure the door seal is reinstalled properly on the driver's side rear door.



3. Make sure the door seal is reinstalled properly on the driver's side rear door.

[14] Troubleshooting

Perform the following sequence procedures if there is any lamp malfunction.

⚠ CAUTION
Check that the headlamp switch is OFF before removing/replacing the bulbs.

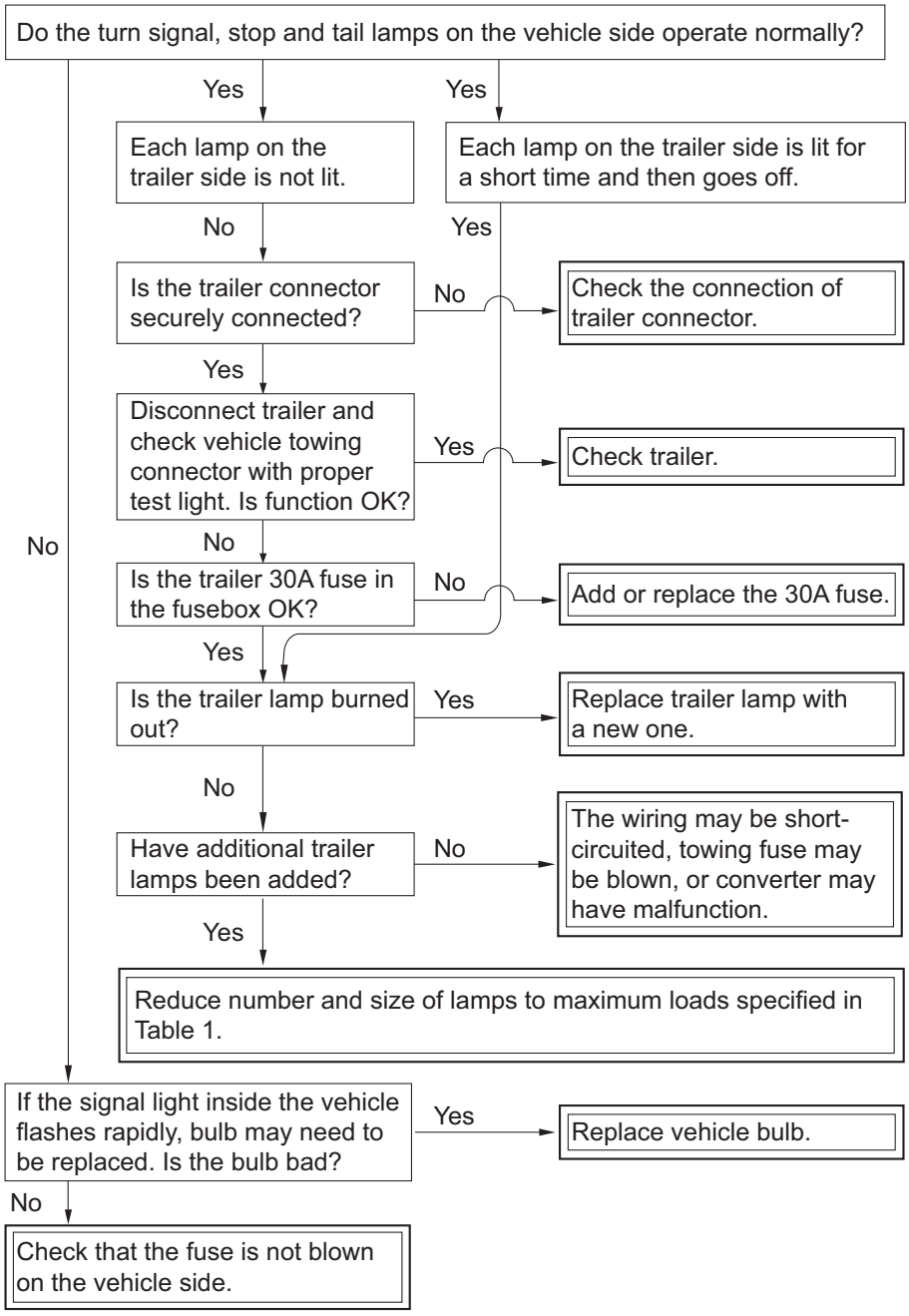
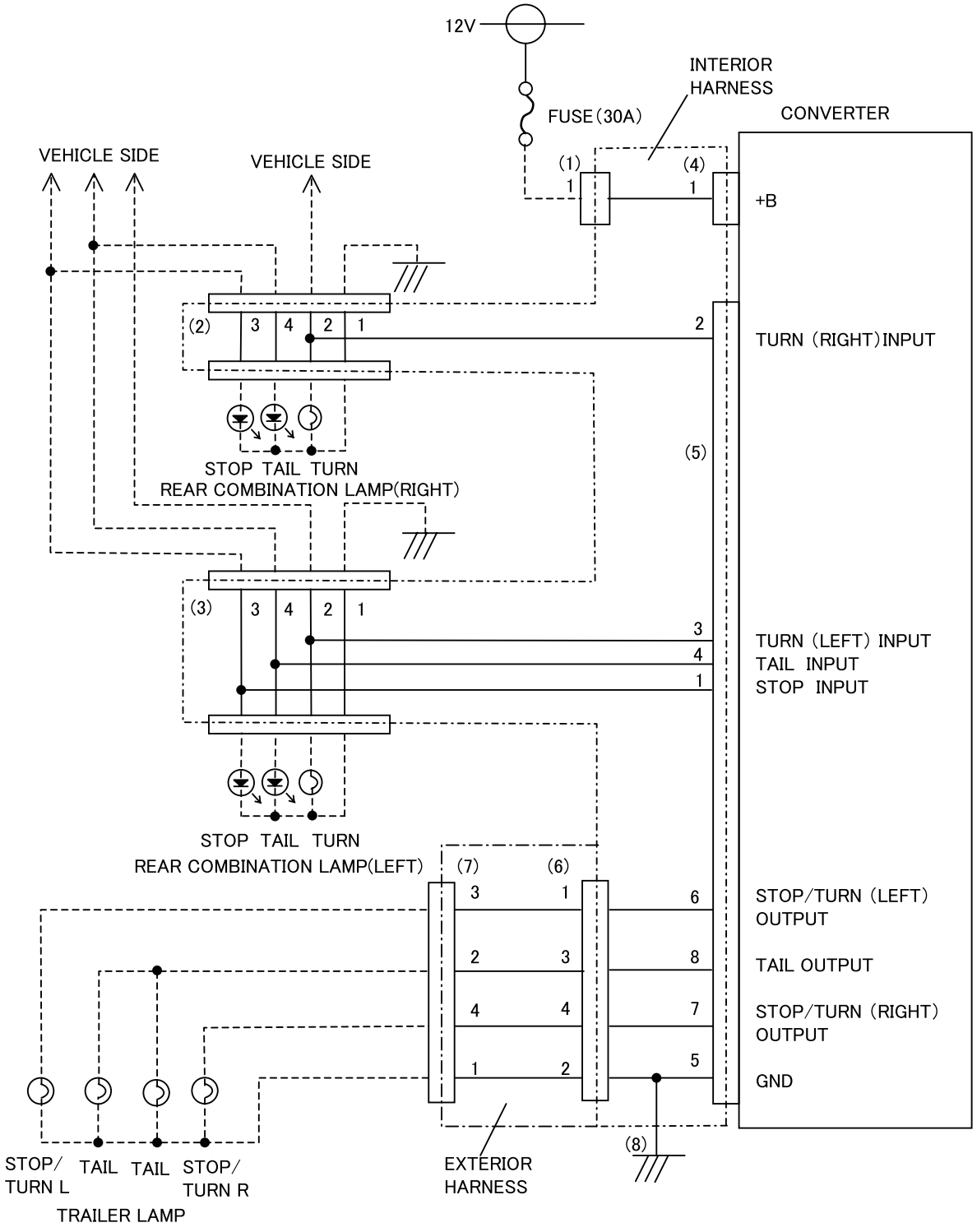

Do the turn signal, stop and tail lamps on the vehicle side operate normally?
Yes
Yes
Each lamp on the trailer side is not lit.
Each lamp on the trailer side is lit for a short time and then goes off.
No
Yes
Is the trailer connector securely connected?
No
Check the connection of trailer connector.
Yes
Disconnect trailer and check vehicle towing connector with proper test light. Is function OK?
Yes
Check trailer.
No
No
Is the trailer 30A fuse in the fusebox OK?
No
Add or replace the 30A fuse.
Yes
Is the trailer lamp burned out?
Yes
Replace trailer lamp with a new one.
No
Have additional trailer lamps been added?
No
The wiring may be short-circuited, towing fuse may be blown, or converter may have malfunction.
Yes
Reduce number and size of lamps to maximum loads specified in Table 1.
If the signal light inside the vehicle flashes rapidly, bulb may need to be replaced. Is the bulb bad?
Yes
Replace vehicle bulb.
No
Check that the fuse is not blown on the vehicle side.

Table 1

Rated Current Capacity	TAIL	MAX 7.8A
	STOP/TURN (RIGHT)	MAX 4.5A
	STOP/TURN (LEFT)	MAX 4.5A

[15] Wiring Diagram



CONNECTOR